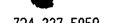
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X. APPENDIX

- An improved aluminum alloy with reduced susceptibility to high 1. temperature oxidation, said alloy consisting essentially of: about 0.65-0.9 wt.% silicon, about 4-4.7 wt.% copper, about 0.6-0.9 wt.% manganese, about 0.35-0.55 wt.% magnesium, up to about 0.15 wt.% iron and a balance of aluminum, incidental elements and impurities.
- The alloy of claim 1 which further contains one or more of: up to about 2. 0.25 wt.% zinc, up to about 0.15 wt.% titanium, up to about 0.1 wt.% chromium, and up to about 0.001wt.% beryllium.
 - The alloy of claim 1 which contains about 0.7-0.85 wt.% silicon. 3.
 - The alloy of claim 1 which contains about 4.1-4.5 wt.% copper. 4.
 - The alloy of claim 1 which contains about 0.65-0.85 wt.% manganese. 5.
 - The alloy of claim 1 which contains about 0.14 wt.% iron or less. 6.
 - The alloy of claim 1 which is suitable for manufacturing into a forged part. 7.
 - The alloy of claim 7 wherein said forged part is a vehicle wheel. 8.
 - The alloy of claim 7 wherein said forged part is an acrospace wheel. 9.
- The alloy of claim 7 wherein said forged part is an aerospace brake 10. component.



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- 11. The forged part of claim 7 which exhibits an improved T6 fracture toughness greater than 21 ksi vin.
- 12. A forged aircraft wheel having reduced susceptibility to high temperature oxidation, said wheel made of an alloy composition consisting essentially of: about 0.65-0.9 wt.% silicon, about 4-4.7 wt.% copper, about 0.6-0.9 wt.% manganese, about 0.35-0.55 wt.% magnesium, up to about 0.15 wt.% iron and a balance of aluminum, incidental elements and impurities.
- 13. The wheel of claim 12 which further contains one or more of: up to about 0.25 wt.% zinc, up to about 0.15 wt.% titanium, up to about 0.1 wt.% chromium, and up to about 0.001 wt.% beryllium.
 - 14. The wheel of claim 12 which contains about 0.7-0.85 wt.% silicon.
 - 15. The wheel of claim 12 which contains about 4.1-4.5 wt.% copper.
 - 16. The wheel of claim 12 which contains about 0.65-0.85 wt.% manganese.
 - 17. The wheel of claim 12 which contains about 0.14 wt.% iron or less.
 - 18. The wheel of claim 12 which is an inboard wheel.
- 19. The wheel of claim 12 which exhibits an improved T6 fracture toughness greater than 21 ksi √in.

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- 20. A forged vehicular brake component having reduced susceptibility to high temperature oxidation, said brake component made of an alloy composition consisting essentially of: about 0.65-0.9 wt.% silicon, about 4-4.7 wt.% copper, about 0.6-0.9 wt.% manganese, about 0.35-0.55 wt.% magnesium, up to about 0.15 wt.% iron and a balance of aluminum, incidental elements and impurities.
- 21. The brake component of claim 20 which further contains one or more of: up to about 0.25 wt.% zinc, up to about 0.15 wt.% titanium, up to about 0.1 wt.% chromium, and up to about 0.001wt.% beryllium.
- 22. The brake component of claim 20 which contains about 0.7-0.85 wt.% silicon.
- 23. The brake component of claim 20 which contains about 4.1-4.5 wt.% copper.
- 24. The brake component of claim 20 which contains about 0.65-0.85 wt.% manganese.
- 25. The brake component of claim 20 which contains about 0.14 wt.% iron or less.
- 26. The brake component of claim 20 which exhibits an improved T6 fracture toughness greater than 21 ksi √in.
 - 27. The brake component of claim 20 which is a piston housing.